

Please add new claims 25-26:

25. (new) The isolated infectious Respiratory Syncytial Virus (RSV) particle of claim 2, wherein the RSV RNA further comprises a L gene mutation.

ab

26. (new) The isolated infectious Respiratory Syncytial Virus (RSV) particle of claim 2, wherein the RSV RNA further comprises a deletion of M2-ORF1 and/or SH-ORF2.

REMARKS

The specification is amended herein to correct technical informalities. Specifically sequence identifiers (SEQ ID NO:) have been inserted in the Brief Description of the Drawings and within the text of the specification wherever nucleotide or amino acid sequences are recited. An abstract has been inserted on the last page of the specification and a copy of the abstract is submitted herewith on a separate sheet as Exhibit A. The proper claim to priority and continuing data have been inserted on page 1, line 2 of the specification. A declaration executed by all the inventors is submitted herewith and establishes the proper priority date of the instant application.

Claims 1-24 are pending. Claims 2, 13, and 18 are under active consideration due to the restriction requirement dated November 17, 1999. Claims 2, 13 and 18 are amended herein to merely correct technical informalities and typographical errors. Claim 2 is amended herein to more particularly point out and distinctly claim that which the applicants regard as the invention. Support for the amendments made herein can be found in the specification page 5, lines 30-37, page 6, lines 1-18, page 7, lines 1-7, and page 15, lines 10-18. Support for claims 2, 3 and 18 can also be found in application Serial No. 08/316,439, filed September 30, 1994, now U.S. Patent No. 5,840,520 which issued on November 24, 1998 on page 10, lines 1-9; page 22, lines 19-27; page 36, lines 19-30; and page 66, line 19 to page 77, line 20.

New claims 25 and 26 have been added to more particularly point out and distinctly claim that which the applicants regard as the invention. Support for new claims 25 and 26 can be found at page 55, line 1 through page 63, line 36 of the instant specification.

A Request to Correct Inventorship under 37 C.F.R. § 1.48 and a Petition to Accept Unintentionally Delayed Claim for Priority under 37 C.F.R. § 1.78(a)(3) are being filed concurrently herewith under separate transmittal.

1. **The Rejections under 35 U.S.C. § 102 are obviated by the amendment made herein and should therefore be withdrawn**

Claims 2, 13, and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Collins et al. (WO97/12032). This rejection is in error and should be withdrawn. The priority date of the instant application, as amended herein, is September 30, 1994 and thus predates the Collins reference of 1997. Thus, Collins et al. (WO97/12032) is not available as art to the instant application and the applicants respectfully submit that the rejection under 35 U.S.C. § 102(b) should be withdrawn.

Claims 2, 13, and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Collins et al., 1995, Proc. Natl. Acad. Sci. 92:11563. This rejection is in error and should be withdrawn. The priority date of the instant application, as amended herein, is September 30, 1994 and thus predates the Collins reference of 1995. Thus, Collins et al., 1995, Proc. Natl. Acad. Sci. 92:11563 is not available as art to the instant application and the applicants respectfully submit that the rejection under 35 U.S.C. § 102(b) should be withdrawn.

2. **The Rejection under 35 U.S.C. § 103 is obviated by the amendment made herein and should therefore be withdrawn**

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being obvious in light of Collins et al., 1995, Proc. Natl. Acad. Sci. 92:11563. This rejection is in error and should be withdrawn. The priority date of the instant application, as amended herein, is September 30, 1994 and thus predates the Collins reference of 1995. Thus, Collins et al., 1995, Proc. Natl. Acad. Sci. 92:11563 is not available as art to the instant application and the applicants respectfully submit that the rejection under 35 U.S.C. § 103(a) should be withdrawn.

CONCLUSION

Applicants respectfully request entry and consideration of the foregoing amendments and remarks. No new matter has been introduced. The claims are believed to be free of the art and patentable. Withdrawal of all the rejections and an allowance are earnestly sought.

Date September 5, 2002

Respectfully submitted,

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EXHIBIT A
ABSTRACT

FILED September 5, 2002
IN U.S. PATENT APPLICATION SERIAL NO. 09/161,122
ATTORNEY DOCKET NO. 7682-045-999

ABSTRACT

The present invention relates to genetically engineered recombinant Respiratory Syncytial Viruses and viral vectors which contain heterologous genes for use as vaccines. In accordance with the present invention, the recombinant RSV viral vectors and viruses are engineered to contain heterologous genes, including genes of other viruses, pathogens, cellular genes, tumor antigens, or to encode combinations of genes from different strains of RSV.

EXHIBIT B
A MARKED UP VERSION OF THE
CLAIMS AMENDED IN THE INSTANT AMENDMENT
FILED September 5, 2002
IN U.S. PATENT APPLICATION SERIAL NO. 09/161,122
ATTORNEY DOCKET NO. 7682-045-999

2. (amended) An isolated infectious Respiratory Syncytial Virus (RSV) [RSV] particle containing an RSV RNA comprising a binding site specific for an RNA-directed RNA polymerase operatively linked to an RSV RNA comprising sequences [which comprises a chimeric RSV antigenome or genome] encoding antigenic polypeptides of both RSV-A and RSV-B.

13. (amended) A vaccine comprising a chimeric Respiratory Syncytial Virus (RSV) [RSV] the genome of which contains the reverse complement of an mRNA coding sequence operatively linked to a polymerase binding site of an RSV and a pharmaceutically acceptable carrier.

18. (amended) The vaccine of Claim 13 in which the mRNA coding sequence encodes G and F genes of both Respiratory Syncytial Virus [RSV] A and Respiratory Syncytial Virus B.

EXHIBIT C
CLAIMS THAT WILL BE PENDING UPON ENTRY OF THE INSTANT
AMENDMENT
FILED September 5, 2002
IN U.S. PATENT APPLICATION SERIAL NO. 09/161,122
ATTORNEY DOCKET NO. 7682-045-999

2. (amended) An isolated infectious Respiratory Syncytial Virus (RSV) particle containing an RSV RNA comprising a binding site specific for an RNA-directed RNA polymerase operatively linked to an RSV RNA comprising sequences encoding antigenic polypeptides of both RSV-A and RSV-B.

13. (amended) A vaccine comprising a chimeric Respiratory Syncytial Virus (RSV) the genome of which contains the reverse complement of an mRNA coding sequence operatively linked to a polymerase binding site of an RSV and a pharmaceutically acceptable carrier.

18. (amended) The vaccine of Claim 13 in which the mRNA coding sequence encodes G and F genes of both Respiratory Syncytial Virus A and Respiratory Syncytial Virus B.

25. (new) The isolated infectious Respiratory Syncytial Virus (RSV) particle of claim 2, wherein the RSV RNA further comprises a L gene mutation.

26. (new) The isolated infectious Respiratory Syncytial Virus (RSV) particle of claim 2, wherein the RSV RNA further comprises a deletion of M2-ORF1 and/or SH-ORF2.

EXHIBIT D
A MARKED UP VERSION OF PARAGRAPHS IN THE
SPECIFICATION AMENDED IN THE INSTANT AMENDMENT
FILED September 5, 2002
IN U.S. PATENT APPLICATION SERIAL NO. 09/161,122
ATTORNEY DOCKET NO. 7682-045-999

On page 1, line 2 please insert the following paragraph:

The present application is entitled to and claims right of priority under 35 U.S.C. § 120 to Application No. 08/316,439, filed September 30, 1994, now U.S. Patent No. 5,840,520, issued November 24, 1998; and Application Serial No. 60/060,153, filed September 26, 1997; to Application Serial No. 60/084,153, filed May 1, 1998; and Application Serial No. 60/089,207, filed June 12, 1998.